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Field Peas

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Field peas, usually called Canada field peas and sometimes wrongly called cow peas, are similar in their habits of growth to common garden peas. They usually make a larger growth of vine and produce more forage. In the high irrigated districts of Eastern Oregon the field pea alone or planted with oats or barley is most useful as a silage crop, an annual hay crop, as a hog or sheep pasture, and in some cases as a seed crop. In some of the better dry-farming districts of the Columbia Basin, field peas planted alone are useful for hay, pasture, or for seed purposes. They give very good yields, being grown on the better lands instead of summer fallow in a rotation with wheat. In the Willamette Valley and that region west of the Cascade Mountains and east of the Coast Range, field peas are good as an early spring-planted crop. They are used as an emergency hay or silage crop when vetch has not been planted in the fall. They are also used for summer hog pasture. In the Coast districts oats-and-peas is probably the best silage crop. It makes good hay and is one of the best summer green feeds when pasture is short.

Plant Lice Injure Late Peas. In the Willamette Valley, the culture of field peas is limited to some extent by the aphids or plant lice which seriously injure the crop in some years. Late-planted peas are especially susceptible to aphid injury. Pea weevils also make it difficult to grow peas as a seed crop in this Valley.

Cool Season Best. Field peas do best under cool conditions and only make a successful crop in sections that are cool or when they are planted early enough so that they may make most of their growth in the cool part of the growing season. They reach their best development in sections where there is plenty of moisture, as in the Coast districts or some of the high, irrigated sections.

In the Columbia Basin and in other dry-farm districts where moisture has been conserved by early spring plowing, field peas planted early will have moisture enough, so that they frequently make a very good growth before the hot, dry summer comes on. Where there is less than fifteen inches of rain a year, the peas are somewhat questionable, in that they dry out to a considerable extent the seed bed for the following crop of fall wheat. Because the harvest of field peas in the Columbia Basin comes at about the same time that wheat harvest is on some farmers do not like them except for hogging or sheeping off.

Field peas do best on rather mellow soils reasonably well drained and rich. Sandy and silt loam soils are particularly good for field pea development. While they make a very luxuriant growth on some of the heavier soils where drainage is good, the mellow type with plenty of available fertility produces the most rapid development and a larger forage or grain growth.

Land-plaster Helps Peas. Like most other legumes, field peas respond to applications of land-plaster or of sulfur. In sections where sulfur gives good results on alfalfa it is also a good plan to use a little of it quite early in the spring on peas, or probably better still, to use land-plaster at about 50 to 75 pounds an acre. In Western Oregon dis-

tricts and in the Coast districts applications of land-plaster in March or April are very useful in securing best forage yields with field peas.

Inoculation Often Necessary. Field peas will usually make an excellent growth without inoculation where garden peas or common vetch has been successfully produced. In sections where the field peas are an entirely new crop, it is best to inoculate the seed. Bacteria for this purpose may be purchased from the department of Bacteriology of the Oregon Experiment Station at Corvallis, at a cost of 50c for a package big enough to inoculate two acres. This material is put on the seed, and the seed should be planted just as soon as it is dry enough to run through the drill without sticking.

Soil from garden land that has produced garden peas may be used to inoculate the new field. This should be scattered at 150 or more pounds an acre over the field to be inoculated and should be harrowed in at once, as sunlight will kill the bacteria in a very short time.

Early Planting Best. It is useless to plant field peas unless they can be planted early. In the Western Oregon districts this should take place in March or April. In the high, irrigated districts usually the April planting is best. In the warmer districts of the Columbia Basin, only March planting or very early April planting is successful.

Experiments at Moro, Astoria, and Corvallis, as well as the experience of many farmers who have grown peas, show that there is a very rapid decline in vigor and in yields as the peas are planted medium to late in the spring.

Peas should be planted deep enough to get moisture for germination. One and a half to two inches is a good depth. They may be planted with a grain drill, carefully set to avoid crushing the peas.

Standard Varieties. Varieties that have generally given best results in the high altitudes and in the dry-land districts are Kaiser, Bangalia, and Carleton. Excellent varieties for west of the mountains are White Canadian, Blue Prussian, and in some instances Arthur.

Amount to Plant. Field peas are planted at about 90 to 120 pounds an acre alone in the moist or irrigated districts. When planted with oats or barley they are usually planted at 90 pounds of the peas to about 1¼ to 1½ bushels of oats or barley. Oats are commonly used where hay or silage is wanted. Beardless-barley-and-peas is often used for silage as well as hay purposes. This combination is probably best for hogging or sheeping off. The grain adds to the tonnage, helps to hold up the peas, and makes harvesting easier.

Planting on Fallow. Under the dry farm conditions where the rainfall is light, peas are planted in double rows about three feet apart. This is done by planting through a grain drill. Two holes are left open and enough are closed to make about a three-foot space. Forty-five to 60 pounds of seed is planted to the acre.

Harvest Methods. Pea lifter guards, attachments for the mower cutter bar, are necessary for easy cutting of the pea crop.

Field peas are ready to harvest for silage when they have reached a good table stage or when the grain that is planted with the peas is in the soft dough.

When the peas are cut and put into the silo, it is usually necessary to add water, and they must be tramped pretty thoroughly in the silo.

For hay, the peas are usually cut when the pods are about half filled or when the grain is in a late milk or an early soft dough stage. Field pea hay does not shed water very well so it should usually be put in a covered mow or if stacked should be topped out with straw or grass.

For seed, field peas are usually cut when they have reached an advanced hard dough stage and the pods are beginning to turn yellow. Peas for seed must be cut before they begin to shatter. They are then shocked in rather large shocks to avoid serious shattering loss.

Special Threshing Precautions. In threshing peas for seed the machine must be slowed down very slow, and sharp surfaces, such as metal concave corners and grate bars, must be protected. Very often screw conveyors must be adjusted so that the field pea seeds will not be crushed. Split peas, while useful for stock feeding purposes, do not bring the price of good seed.

For hogging-off purposes field peas are ready any time after they reach the table stage, and may be hogged off as long as they last in the field. Field peas and barley make the best combination for hogging-off purposes.